Development of a Brownfields Restoration and Re-use Site Description Compendium for Coastal Communities

A Response to NOAA's Coastal Services Center Announcement for Coastal Management Fellowship

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Prepared by the Delaware Coastal Programs
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DELAWARE COASTAL MANAGEMENT PROGRAM

Introduction

This document represents the Delaware Coastal Programs (DCP) response to NOAA's Coastal Services Center's (CSC) September 2002 request for project proposals for Coastal Management Fellowships. It is a joint proposal from the DCP and the Delaware Division of Air and Waste Management (DAWM) that addresses a common priority issue, Brownfields redevelopement. Redevelopment of Brownfields provides environmental improvements in degraded coastal areas, economic revitalization in coastal communities, and is an important land use strategy that can help stem the problems associated with sprawling development, one of the largest threats to coastal resources. As outlined by the PEW Ocean Commission in their report titled *Coastal Sprawl – The Effects of Urban Design on Aquatic Ecosystems in the U.S.,* the United States will experience "sharp and irreversible" declines in the health of coastal waters unless growth problems are addressed in the metropolitan regions. This project aims to avoid future degradation of coastal resources due to development by improving mechanisms to restore Brownfields, thereby reducing development pressures and associated coastal impacts in undeveloped areas while revitalizing underutilized or abandoned land along the Delaware Coast.

The State of Delaware has been facing tremendous developmental pressures over the past decade due to an influx of businesses attracted to the State by friendly tax laws and by great economic growth. This economic growth, coupled with its corresponding repercussions on land use in the State, has sparked tremendous concern regarding responsible development policies. Brownfield redevelopment is a cornerstone of such policies. Remediation and redevelopment of Brownfield sites helps funnel commercial or industrial development into areas already possessing necessary infrastructure, helps revitalize communities, and improves environmental health by removing or sequestering environmentally available contaminants.

Brownfield redevelopment is one of the key components of a broader strategy to address the growth pressures and sprawl in Delaware, Governor Minner's Livable Delaware Initiative. It is also a critical tool in that it provides opportunities to address land use issues and ecological improvements in and around some of the more degraded areas of the coast. Recognizing the importance of this component of the State's strategy, numerous policies exist that promote Brownfield redevelopment. The DCP has a formal development policy that states "Use of existing unused industrial sites and buildings should be encouraged whenever they can be adapted to today's needs." In addition, Section 303 of the Federal Coastal Zone Management Act of 1972 identified the re-development of deteriorating urban waterfronts as one of its goals. Delaware's Brownfield Legislation was signed into law in 1995. In addition, Delaware's Legislature also passed an amendment to Delaware's Hazardous Substance Cleanup Act (HSCA) to encourage voluntary agreements for redeveloping Brownfield sites and to streamline the site cleanup process. Fiscal incentives have also been put in place to complement the regulatory tools. The State provides corporate tax credits to businesses for cleanup and redevelopment of Brownfields and a State financial assistance program administered through the Delaware Economic Development Office (DEDO) to offset a portion of the costs associated with the investigation and cleanup of Brownfields.

Despite the State's efforts to make Brownfield redevelopment a more attractive development option, Brownfield restoration and re-use has not reached its full potential in Delaware for a number of reasons. Apprehension and fear of liability are still limiting factors that deter many interested parties from considering the restoration or redevelopment of Brownfield areas. Much of this apprehension arises from a lack of basic information about sites which adds uncertainty to the preliminary planning phase of projects. Much of this apprehension may be overcome by clear and detailed information regarding site history, contaminant types and levels, environmental threats, potential for re-use, cleanup costs, and/or a list of unknowns about the site for a potential developer early in the planning process. In addition, community concern of potential contamination issues, local zoning and local ordinances can impede redevelopment of sites. Providing more information about these sites to local communities will enable them to better address and plan for appropriate restoration and redevelopment of Brownfields and to avoid conflicting local codes that hinder community revitalization in these areas.

The critical mechanisms for restoration and re-use of Brownfields are in place in Delaware, but, additional efforts are needed to develop tools to promote and market potential sites for restoration and re-use. One such tool is a detailed compendium of Brownfield sites across the State of Delaware that describes each site, its potential for redevelopment, obstacles to be overcome for redevelopment, and the opportunities for assistance with compatible redevelopment.

This project will develop this type of Brownfields resource tool for Delaware's Coastal Zone, waterfront areas and communities. Through a structured and deliberate process, the most useful information about Brownfields will be identified, existing disparate data and information will be collected and organized, and data and information gaps will be determined. All of this information will then be compiled into detailed site profiles. Based on the profiles, sites will be prioritized for restoration and redevelopment based upon environmental and economic factors. This information will be included in a comprehensive compendium for use in promoting and marketing the wise re-use of land in Delaware. An accompanying ArcGIS based decision support system will also be developed that provides graphical representation of pertinent information. This information will be made available to the general public on the internet and can be utilized for site re-use decisions that is scalable to the State, regional, local, and parcel level. Finally, the use of this information and how it can be integrated to enhance existing Brownfield efforts will be presented to those who can use it most through a series of Decision Maker workshops in cooperation with staff from the Delaware National Estuarine Research Reserve (DNERR) and DAWM. This project will likely serve as a prototype for an effort to be expanded Statewide.

Goals and Objectives

The goal of this project is to increase the rate and acreage of Brownfield restoration and re-use in Delaware's coastal communities, thereby reducing development pressures and associated coastal impacts in undeveloped areas.

This goal will be accomplished through the following:

- Development of a detailed compendium of site profiles and assessments for Brownfields in Delaware including prioritization scheme. This will help identify and market the re-use of Brownfields
- Development of an accompanying ArcGIS based decision support system.
- Outreach to stakeholders including developers and coastal communities to address impediments to Brownfield development.
- Decision-maker workshops that illustrate the use of the tools developed during this project and how they enhance the potential for Brownfield development in Delaware.

Milestones and Outcomes

This project will provide needed site specific information on Brownfields such as the current technical information regarding any contamination or problems with the site, potential re-development uses that are compatible with the local jurisdiction's land use plans, and other pertinent site information helpful to State, county, and local land use officials and prospective redevelopers.

This project, coordinated by the Fellow, will be carried out in five (5) phases, each of which is considered a significant milestone and has a well-defined product (outcome). The project phases, deliverables, and deliverable date from the time of project initiation are summarized in the following table. Each phase and associated deliverable is described in more detail in the project description section of this proposal.

Project Description

Phase 1: Preliminary Information Assessment and Implementation Plan Development

The first phase of this plan will involve scoping key issues related to Brownfield redevelopment, identifying the Brownfield information needs that will help address these issues, and developing a project implementation plan. Targeted Users and Decision makers must be involved early-on to ensure that the system will meet their needs and contain the information they require for making decisions.

The issue identification stage will require a series of face to face meetings with a diverse group of people involved with Brownfields issues. This group will include key technical staff that currently administer Brownfields efforts in Delaware, community leaders concerned with Brownfield sites in their community, property owners of Brownfield sites, technical experts that conduct site evaluations for potential toxicity problems on sites, economic development representatives and other interested groups. It may also be necessary to hold some workshops that pull many of these groups together to discuss the many issues surrounding Brownfields and the types of information that would be most useful to

them to make decisions on potential Brownfield site restoration.

Once the key information needs are identified, a team of technical staff from the DCP and DAWM will work with the Fellow to determine those data types that can be collected and synthesized in a GIS format and how best to design a GIS based decision support system.

This information will then be used to develop an implementation plan to guide the process of compiling a Brownfields Restoration and Re-use Site Description Compendium for Coastal Communities.

Phase 2: Brownfields Site Inventory of Sites in Coastal Areas

The second Phase will focus on the delineation of the geographic areas of focus and the collection of existing data and information for each Brownfield site in Delaware. It is expected that when broadly defined, several thousand Brownfield sites may exist in Delaware and it is unrealistic to expect that all can be inventoried and described in this project. Therefore, specific geographic areas must be identified in and around our existing coastal communities and known ecologically sensitive areas in the State.

An initial spatial review of suspected or potential sites will be conducted using existing ArcGIS compatible data files previously developed as part of Delaware's Environmental Navigator project. This project has undertaken efforts to integrate much of the existing regulatory data for Delaware over the past two years, providing a solid database to build upon for Brownfields. This will likely include the spatial review of known State Hazardous Substance Cleanup Act sites, Leaking Underground Storage Tank sites, Abandoned Industrial sites, former and existing salvage yard sites, landfills, and other areas already mapped. From this information, a geographic area of key sections of Delaware's coastal area will be chosen that includes a number of sites that the Fellow, mentors, and supporting project team are confident can be realistically inventoried.

Once the area of interest is delineated, work will be conducted to inventory the sites. This will involve collection of key data and information from existing site evaluation documents, ownership information, economic information such as tax records or available appraisals of real property values, historical records about the use of the site, deed search information, interviews with people knowledgeable about particular sites, field visits (when feasible), aerial reconnaissance from helicopter to collect photography of sites, etc. Data will also be collected about existing land use zoning, surrounding zoning and land use, community desires for the future use of the site if restored or re-used, and regional environmental information such as any ecologically significant resources the site is near or may have the potential to affect. This information will be synthesized into a standard format for each site that can be easily used in the development of the final site compendium. Wherever possible, data will also be developed into spatial data layers for site analysis.

Phase 3: Prioritization of Sites for Redevelopment.

In Phase 3, efforts will be undertaken to refine ranking criteria to prioritize the sites for restoration or re-use based on the knowledge gained from the site inventory experience. This will be conducted with a group of stakeholders and professionals involved in Brownfields restoration and re-use.

This phase will enable the development of a prioritized list of Brownfield sites for restoration and re-use. The highest priority sites will be given additional attention and added details for their site profiles.

Phase 4: Synthesis of Brownfields Information into Draft Document

Phase 4 will be the stage in which the information collected over the first 18 months is synthesized into a formal document. This will include both the refinement and information collected to date and the consideration of public input received during Phase 3. The document will provide an explanation of the process, how sites were selected and prioritized, and the compendium of Brownfield sites that were inventoried and characterized. The document will also provide guidance on how communities can work with DAWM programs, the Delaware Economic Development Office, the Delaware Coastal Programs, and others to promote the restoration or re-use of Brownfield sites.

The Fellow, with strong logistical support from the DCP and DAWM, will conduct a series of workshops with effected communities to review the work to date, including preliminary Brownfield site profiles and ranking. It will provide critical community feedback on the potential for the site, community interest in the potential compatible redevelopment uses, and an opportunity for communities to be involved in the ranking of sites for restoration and re-use. This is critical, as community support will be a major pre-requisite for successful restoration of Brownfield sites.

The workshops will be part of a Coastal Decision Maker Workshop Series, in cooperation with staff from the Delaware National Estuarine Research Reserve (DNERR) focusing on how to use this compendium and associated ArcGIS decision support system can be used as a tool for Brownfields restoration. These workshops will also cover broader content on the specific programs of DAWM, DEDO, USEPA, NOAA and others to address Brownfield issues at the local level.

Phase 5: Completion of Final Document and Distribution

Phase 5 will include the completion, layout and printing of a final compendium for Brownfield redevelopment. The compendium will also provide key recommendations and guidance. This product will be distributed in a number of ways including in hardcopy format, digital format, and via a web page. It will also be presented to interested communities around the State.

In addition to the document, the ArcGIS based system will also be released as a tool for spatial analysis to be used by communities or prospective parties interested in restoring or re-using Brownfield sites.

Fellow Mentoring

From project initiation to completion of the Fellowship term, the Fellow will be fully integrated into this project as part of a project team. The Fellow will be under the primary supervision of the Delaware Coastal Programs' Environmental Program Manager II, but will

work very closely with staff from both the DAWM and the DCP. The Fellow will be located in the same offices as the DCP staff, and will have office space available at the New Castle offices of the DAWM. The Fellow will truly be a part of the Delaware Coastal Programs and one of the Program's key networked agencies for the full two years.

The challenging tasks of this project cannot be met by an individual effort. It will require the teamwork of many. As such, the Fellow will be part of this team of coastal management professionals, and will never be left without a team member to provide guidance or assistance at the time it is needed. This team integration approach will ensure that the Fellow receives the maximum concentration of educational and professional development opportunity possible while gaining valuable experience on the front lines of one of the most pressing, and challenging, coastal management and land use management issues facing not only the State of Delaware, but coastal states nationwide.

The DCP team for this project has extensive experience to carryout each phase of this project, providing the Fellow an opportunity to work very closely with professionals with various types of specialized expertise. The Fellow will be encouraged to take the lead on any and all phases, and will have the guidance, assistance, and leadership from a pool of team members whenever needed to ensure the project's success.

The Project Team and percent of their staff time dedicated to this project is outlined below:

- CSC Fellow (100%)
- David B. Carter, DCP Environmental Program Manager II (10 %)
- James M. Poling, Brownfields Coordinator (15%)
- Marjorie Crofts, DAWM Deputy Principal Assistant (10 %)
- Susan Love, DCP Planner (30%)
- Rico Santiago, DCP Environmental Scientist (20%)
- Lonnie Dye, DCP Computer Support (20%)
- Karissa Hendershot, DAWM Environmental Scientist (15%)
- Kimberly B. Cole, DCP Environmental Scientist (10%)
- Katy Lamborn, DNERR Acting Manager/Education Coordinator (5%)

The Fellow will also be offered the opportunity to participate in other DCP and/or DAWM efforts for further educational and professional development and integration into Delaware's Coastal Management Program. This will include working on an assistance grant program to local governments, federal consistency, community open space habitat restoration programs, benthic habitat mapping, Shorebird and Horseshoe crab population studies, and working with environmental justice issues. These will provide opportunities to conduct fieldwork, policy analysis, data analysis and technical research.

Project Partners

The project partners listed below each have responsibilities for the implementation of the Brownfields program in Delaware. They also have a vested interest in the development of a detailed compendium of Brownfield sites located in delineated coastal areas to target for redevelopment. All have agreed to participate in the project and provide the data and information necessary to make the project a success.

- Department of Natural Resources and Environmental Control
    - Division of Soil and Water Conservation
        - Delaware Coastal Programs
        - Delaware National Estuarine Research Reserve
    - Division of Air and Waste Management
- County and Municipalities with Brownfields within their Jurisdictional Boundary
- Delaware Economic Development Office
- Office of State Planning and Coordination
- Developers
- Environmental Community

Cost Share Description

The Delaware Coastal Management Program will provide a furnished office along with the core group of DCP staff assigned to the project. This will also include a personal computer with office software (Microsoft Office), Arc View Software, access to workstation Arc/Info, and other software as needed. The Fellow will also have full State e-mail and internet e-mail capabilities, WWW access, access to all DNREC and DCP network data drives (Approximately 60 GB of GIS & Non-spatial data), and will have access to a shared laptop.

In addition, the DCP will provide funds and materials for all workshops & symposiums required for the project, funding for any necessary training, as well as printing, photocopying, mailing, and incidental costs for project interim products. Significant other funds will also be available for expert contractual assistance with the GIS system customization and database development for this project.

The DAWM will provide the $15,000 Fellowship match through the State of Delaware General Fund appropriation that funds implementation of Delaware's Hazardous Sites Cleanup Act. This will be paid in two $7,500 per year payments. DAWM will also provide office space with computer and network access and other office needs at the New Castle office where the SIRB program is housed. In addition, DAWM will provide the needed technical assistance and project support for this Fellowship project.